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SUPERIOR MANUFACTURING CORP.

Over 50 years of superior water conditioners
in Fort Wayne, Indiana



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Over 50 years of Superior Water Conditioners in Fort Wayne, Indiana

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Chemical water treatment has long been the traditional method for controlling scale and corrosion in water heaters, boilers, cooling towers, heat exchangers, and many other HVAC and industrial heating, cooling and steam process applications. However, it is not the most cost-effective, user-friendly or environmentally safe way to do so.

Superior Manufacturing Corporation is a second-generation family business in Fort Wayne, Indiana, that has been producing a viable chemical-free alternative treatment product line since 1964. Charles “Chuck” Sanderson Jr. is the vice president and co-owner of the company his father, Charles Sr., established more than 50 years ago. Charles Sr. used to sell chemicals, but always thought there had to be a better way to deal with the damaging effects caused by hard water. Through extensive research, he discovered that magnets could be used to eliminate scale build-up when assembled in the right configuration.

How it works

Superior Manufacturing’s flagship product, the Superior Water Conditioner, contains a permanent magnetic core that has a unique and proprietary multiple-pole, multiple-field orientation along the length. As water passes through the treatment chamber, the dissolved minerals are exposed to a series of reversing polarity alternating magnetic fields, which alter their natural tendency to be attracted to one another and bond tightly together, forming



a hard and brittle calcite scale buildup on heat transfer surfaces of equipment and piping. Instead, the minerals push away and repel one another, at the molecular level, and precipitate out of solution in a softer suspended state commonly called aragonite, which will either flow right on through the plumbing system, or drop to a low point in water-using equipment where they can easily be purged through blow-down (draining).

“Conventional chemical treatment methods, which have been used for more than 150 years for controlling scale, are typically designed to keep the minerals dissolved in the water, not allowing them to precipitate out of solution,” explains Chuck. “This causes the total dissolved solids [TDS] in system water to increase quickly, in turn, requiring the need to bleed off considerable amounts of water from the system. Chemicals can be used as an effective method of controlling

scale, but they are a very costly ongoing expense and can be quite harmful to our environment when frequent blowdown or bleed-off is required. Furthermore most chemicals used for scale control are acid based, requiring other chemicals to inhibit corrosion, countering their damaging effects on metallic wetted surfaces of equipment and plumbing systems.”

“Our chemical-free treatment technology is much easier on equipment and the environment, as we neither add, nor remove, anything from the water, so purity is not affected in any way,” he continues. Developed in 1964, the Superior Water Conditioner has been around longer than any of its competitors also using chemical-free treatment technology. Chuck states that his permanent magnetic product line is better for the environment and offers significant cost savings to the customer by eliminating the need for and disposal of costly and harmful chemicals. On top of that, these products require absolutely no energy to operate – but they face many of the same challenges as other green products. Many

companies have used chemicals through the years and are resistant to change.

Building a greater market share

As interest builds for sustainable alternative treatment methods, Chuck and his team are taking on a major rebranding initiative to better tap into the market. Education is critical to the company’s growth. With a broad range of applications, Superior Water Conditioners span the residential, commercial and industrial markets. They work just as effectively for small, in-home humidifiers and ice makers as they do in commercial food service equipment, and industrial boilers and cooling towers. “We haven’t changed much about our product over the years, as we are still using the same tried and true technology as in the beginning,” Chuck notes. “But with over 400 different types of applications for our products, both with standard models, as well as specially designed original equipment manufacturer models, there is plenty of market potential.”



The company's recently redesigned website serves as an excellent resource for existing customers and new prospects. Superior Manufacturing also has a fresh new logo and is working on revising its marketing collateral by developing new videos and brochures. While print and digital marketing is vital, Chuck and his colleagues have also been ramping up their in-person efforts at trade shows and conventions.

Showcasing at Greenbuild 2015

Since 2005, the Superior Manufacturing team has attended the Greenbuild International Conference and Expo every year – and will again in 2015. “I think the trade show is great,” says Chuck. “Many people are genuinely seeking sustainable alternatives for water treatment, whether they have their own concerns, or in some cases, new governmental regulations are mandating that they do so.”

New customers can take a page out of the company's portfolio for inspiration. Superior Manufacturing has had a long-term partnership with L&L Products for several years. “In 1990, we developed a system for L&L Products, a Michigan based company, called the Environmentalist/Zero Bleed,” Chuck recounts. “They previously had a water softener to pretreat their well water, which was used as makeup in their four cooling towers, and then they were also adding liquid chemicals on top of that for scale and corrosion control. An engineer came down to talk to my dad about our system. L&L was interested because they had an issue with the local Department of Natural Resources [DNR], as they were flooding the wetlands behind their property with chemically contaminated water from their cooling tower blowdown. All their problems were resolved when they converted all four cooling towers to our chemical-free, zero-bleed water treatment system.”





“They were kind of our guinea pigs, with respect to this, then new, zero-bleed technology,” he continues. “The primary part of our system spins out the suspended solids, which are byproducts of our treatment process from the water that would typically go out to the wetlands as discharged waste. And from there, they are sent to the secondary part of the system for further removal through sock filtration equipment. Then the reclaimed clean and processed water is returned to the cooling tower sump, saving 100 percent of the water that was previously being discharged to the wetlands, saving them over 2,000,000 gallons of water annually. Additionally, L&L has saved hundreds of thousands of dollars in the past 25 years in chemical treatment and fines from the DNR with the use of our systems.”

Superior Water Conditioners are proven to control scale and corrosion, as well as eliminate chemical water contamination while saving users money. Through the company’s rebranding and continued ramped up marketing efforts, Superior Manufacturing Corp. is increasing its market share while helping customers improve the sustainability of their homes, businesses and facilities. •

US BUILDERS REVIEW GREENBUILD 2015 EDITOR'S CHOICE HONOREES



The following companies have been recognized as 2015 Editor's Choice honorees due in large part to their forward-thinking nature and ability to drive industry innovations. The 44 recipients of this annual award will be showcased in the Greenbuild Special Edition 2015, which will be released in conjunction with the event in Washington D.C.

Congratulations to our 2015 Editor's Choice honorees!

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